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EFFICIENCY IN BUDGET MAKING

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A budget, to be complete, should not only show the purposes for which appropriations are made but also the sources of revenue to be raised for meeting such appropriations. In this article, however, the revenue side of budget making is not discussed.

In a recent message to Congress, President Taft called attention to the fact that, of all the principal nations of the world, the United States is the only one not on a budget basis. The budget of a government is the principal instrument of financial and administrative control over its expenditures. Without any such means of control it is not surprising that Senator Aldrich should have stated that, in his belief, the annual cost of our federal government could be reduced \$300,000.-000 by applying efficient methods.

As is the case with the federal government, practically all of our states also operate without budgets, and as a logical result the extravagance and waste of public funds by state governments has long been a subject of popular criticism.

Most American cities have, for many years, conducted their financial housekeeping on a budget basis. The methods employed, however, have been loose and inefficient. Instead of being used as a means for apportioning their funds according to the various needs of the community and insuring their actual application thereto by affording a basis for scientific accounting and auditing, the budgets of many American cities have too often been the means of hiding corruption. The making and passing of the budget has frequently been a carnival of log rolling, each alderman or commissioner inserting items for the special benefit of himself or his constituents and refusing to vote for the items inserted by his fellow-legislators unless they voted for those in which he was interested.

The making of a scientific municipal budget was first undertaken in 1906 by the City of New York. The task was approached by way of the health department, that branch of the city's service so closely related to its well-being. The functionalized and segregated budget plan worked out for that department was so successful as an object

lesson that the plan was soon extended to all departments of the city. Similarly New York City was the first to institute real public hearings on a tentative budget. In January, 1910, the Chicago city government adopted a functionalized segregated budget built on the New York plan with the further improvement of standard account titles. Milwaukee was the next to fall into line and Philadelphia has expressed the intention of adopting the idea. Officials of other cities throughout the country are now rapidly becoming interested in how to improve budget methods in their own communities.

The diversion of funds to purposes other than those for which they were originally appropriated has heretofore been rendered comparatively easy through lump sum or "mongrel" appropriations. Philadelphia's 1911 budget furnishes some striking examples of such appropriations:

Postage, ice, files, incidentals, meals, repairs, advertising loans and entertainment of city and visiting officials.	\$25,000
Rent, postage, horse-keep and miscellaneous expenses in survey districts	25,000
Repairs, hauling and labor	60,000

Another striking example is taken from Chicago's 1909 budget before the segregated plan was adopted:

For repairs and renewals of wagons and harness, replacement and keep of live stock, identification, police telegraph expenses, rents, repairs and renewals of equipment, hospital service, printing and stationery, secret service, light and heat and twenty-five more horses and equipment for mounted police and for repair of Hyde Park station; also other miscellaneous expenses, \$205,000.

There can be no justification for making such appropriations. They are so indefinite that adequate accounting or auditing control is impossible. Appropriations couched in such general terms might be expended for almost anything. Moreover, financial reports are often little more than transcripts of appropriation titles arranged in statement form. Reports in which expenditures are grouped in such phraseology can afford but little information to taxpayers as to actual costs. While it is true that auxiliary systems of cost accounting would greatly remedy such conditions, the development of costs should supplement rather than supplant the budget accounting.

Standard Form of Budget

Effective control over expenditures depends largely upon the care with which provisions are made to render ineffective the methods

which have been employed by administrators to circumvent the implied purposes of appropriations. Since an analysis of the requirements of the various departments of a city will develop many elements in common, methods of standardization have been devised which render possible the highest degree of control and stability in the method of preparing the budget.

Standardization of a city budget reduces to a definite fixed classification all of the things or objects of expenditure for which a city spends money. These are usually termed standard accounts. Once having determined the amounts required according to objects of expenditure the next step is to ascertain what public services are to be secured from the expenditure. These public services are known as "functions" and should be shown in a standard budget grouped under departments or other organization units. For example, a health department may perform several functions, such as milk inspection, sanitary inspection, child hygiene, etc.

By means of such an arrangement a clear and comprehensive picture of the various municipal functions and activities is obtained and a basis made available for judging understandingly the adequacy or inadequacy of appropriations. Not only are the appropriations for each function shown thereby but also what services or things must be provided in order that such functions may be performed.

After working out a segregation it should be adopted as a standard and not deviated from thereafter, because the comparisons thus afforded between functions, sub-functions and objects of expenditure become of more significance and value from year to year.

It should therefore be made mandatory, through charter provision or ordinance, for the appropriating body to prepare each year's estimates and also pass the budget according to the standard adopted. Besides making possible comparisons between like appropriations from year to year, simplifying and improving the accounting, auditing and reporting methods, the adoption by a city of a segregated and standardized budget makes very difficult the former custom of including "jokers" under the cloak of appropriations for various and indefinitely stated purposes.

A classification under which the objects of expenditure of the City of New York may be logically grouped and which is adaptable to almost any city is as follows:

1. Personal service.
 - (a) Salaries and wages.
 - (b) Fees.
 - (c) Commissions.
 - (d) Other.
2. Supplies and materials.
 - (a) Fuel.
 - (b) Forage.
 - (c) Provisions.
 - (d) Material.
 - (e) Other.
3. Purchase of equipment.
 - (a) Furniture and fittings.
 - (b) Motor vehicles.
 - (c) Vehicles other than motor vehicles.
 - (d) Live stock.
 - (e) Other.
4. Transportation service.
 - (a) Hire of horses and vehicles with and without drivers.
 - (b) Storage of vehicles.
 - (c) Shoeing and boarding horses including veterinary service.
 - (d) Other.
5. Special contractual service.
 - (a) Repairs and replacements.
 - (b) Inspection.
 - (c) Other.
6. Communication service.
 - (a) Telephone.
 - (b) Postage, telegraph and messenger.
7. Miscellaneous expenses.
8. Fixed charges and contributions.
 - (a) Debt service.
 1. Interest.
 2. Redemption.
 3. Sinking fund instalments
 - (b) Rent.
 - (c) Pensions.
 - (d) Insurance.
 - (e) Care of dependents.
 - (f) State taxes.
 - (g) Other.
9. Capital outlays.
 - (a) Purchase of real estate.
 - (b) Construction and betterments

It is desirable that a minimum of discretion be exercised by administrative officials in determining under what classification a given expenditure should be charged, because experience shows that several different officials will sometimes charge an item to several different accounts—each official giving a good reason for his decision. Definite schedules showing the items chargeable to each account title should therefore be prepared, printed and distributed throughout the departments to all employees who prepare purchase requisitions, audit vouchers or keep accounts. The schedules should contain in detail a list of every kind and class of service or thing for which the city spends money, arranged both alphabetically and according to accounts chargeable.

These schedules when prepared should be codified so that each kind and class of service or thing can be readily expressed through the

use of symbols. This may be done, as in Chicago, by using numerals to designate departments and functions; letters to designate the standard accounts, and numerals again for the items chargeable to the several accounts. Another method is the Dewey decimal system of library classification. As an illustration of the Chicago scheme, 24 E 156 might denote absorbent cotton for the bureau of child hygiene in the health department—the numbers 20 to 25 inclusive denoting health department and 24 the bureau of child hygiene, "E" denoting the standard account "supplies" and 156 denoting absorbent cotton. The Dewey system is advocated by the President's Commission on Economy and Efficiency, and is being successfully operated in several departments of the United States government. The simplicity and elasticity of this system as applied to a schedule of supplies is indicated in the following illustration:

A	Supplies.
A 1000	Provisions.
A 2000	Forage and other supplies for animals.
A 3000	Wearing apparel.
A 4000	Fuel.

Extending this method further, "provisions" would be subdivided into further classifications, for example:

A 1100-1199	Meat, fish and fowl.
	Beef:
A 1110	On the hoof.
A 1111	Dressed in carcass.
	Veal:
A 1120	On the hoof.
A 1121	Dressed in carcass.
A 1200-1299	Dairy products and eggs.
	Milk, fresh:
A 1210	Cow's milk.
A 1211	Cow's milk modified.
	Preserved milk:
A 1220	Condensed milk.
A 1221	Evaporated milk.

and so on *ad infinitum* for each classification regardless of the number of classes or the detail involved. Extended so as to include departments or other organization units and the functions performed by

each unit, the code designation D H 11 A 1000 would represent (D H) department of health (11) hospital service—care of patients (A 1000) supplies—provisions. The adoption of a definite code system will not only furnish an excellent basis for requisition and audit, but will simplify the compilation of statistics for use in preparing budget estimates and in making public reports.

The compilation of statistics by use of code symbols is best accomplished by mechanically punching the code symbols in cards and then sorting and tabulating the cards with electric sorting and tabulating machines. Information can now be acquired in this manner which a few years ago was only obtainable through laborious clerical effort.

Salaries and wages of officials and employees represent a very large part of the city's budget—often ranging from one-half to two-thirds of the total. Much political intrigue and jobbery is frequently carried on through failure of the appropriating body to provide for adequate control over appropriations of this character.

To circumvent and minimize, as far as possible, the misuse of salary and wage appropriations, it is essential that they be classified in four general groups, namely:

1. Salaries, regular employees.
2. Wages, regular employees.
3. Salaries, temporary employees.
4. Wages, temporary employees.

Groups 1 and 2 represent remuneration provided for employees engaged during the entire year (including or excluding Sundays and holidays, as the case may be) regardless of season, weather or the quantity or exigency of the work to be done. Groups 3 and 4 represent remuneration provided for employees who render temporary service dependent upon season, weather or the quantity or exigency of the work to be done.

Under groups 1 and 2 would be listed in detail the number of incumbents, rate and amount provided for each class and grade. To illustrate: under salaries, regular employees, might appear

1 director.....	\$5,000
1 chief clerk.....	2,500
2 clerks @ \$1,800.....	3,600
2 bookkeepers @ \$1,800.....	3,600
2 stenographers and typewriters @ \$1,200.....	2,400

and under wages, regular employees,

1 foreman of mechanics	@ \$5.00 per day (365 days)	\$1,825.00
2 carpenters	@ 5.00 " " (313 ")	3,130.00
3 plumbers	@ 5.00 " " (313 ")	4,695.00
1 mechanical engineer	@ 4.50 " " (365 ")	1,642.50

Similarly, under groups 3 and 4, would be listed each class and grade and rate of compensation. Instead, however, of showing the number of incumbents in each class, the schedule would show the time of service based upon the estimated "man" days, weeks or months required for each class and grade of service. To illustrate: under salaries, temporary employees, might be listed:

Accountants	@ \$2,100 per annum (36 months)	\$6,300.00
Stenographers	@ 1,000 " " (18 ")	1,500.00

and under wages, temporary employees might be listed:

Foremen	@ \$5.00 per day (60 days)	\$300.00
Calkers	@ 4.00 " " (60 ")	240.00
Laborers	@ 2.50 " " (1,150 ")	2,875.00

Such grouping will permit the director or other department head to utilize his appropriations for temporary employees as the requirements of the work demand. He could, for example, if the above illustrations were actual appropriations, engage six accountants for six months, twelve for three months or twenty-four for one and one half months, or, in the case of wages, ten laborers for 115 days or one hundred laborers for eleven and one-half days. In fact, he would have entire discretion as to the number of incumbents and length of service for each temporary position so long as the total number of work units expressed in days, weeks or months were not exceeded.

In reply to objections that the administrator should not be tied down to the extent of losing entire discretion in the application of his appropriations, such allowances for temporary employees should be granted, thus providing the elasticity needed to conduct efficiently the work of his department.

Such elasticity as may be necessary in the standard accounts other than salaries and wages may be provided subsequently by *inter se* transfers, herein later discussed.

Segregation of appropriations within a department or other organization unit according to functions, sub-functions, and standard accounts is the only means of affording adequate publicity of the

financial provisions made for carrying on each function. It enables one to ascertain readily, for example, what means are made available for conducting a campaign for the reduction of infant mortality, for milk depots, for visiting nurses, for child hygiene; or to furnish a supply of water, subdivided as to administration, collection and storage, pumping, distribution, analyzing and testing, etc.

The plan of functionalization referred to may be extended so that departments or other organization units can be grouped according to the general functions they perform for the community as a whole. For example, the police and fire departments, building inspection, etc., may be grouped under "public safety." This idea has been advocated for a number of years by the Bureau of Census in Washington and a number of cities in the United States have adopted it in presenting financial reports. General government, public safety, health and sanitation, care of the dependent, delinquent, and defective are some of the broad functions each municipal corporation performs for its community. This kind of functionalized grouping of budgetary appropriations however, can be best shown in the form of a summary, attached to the budget.

Preparation of Budget Estimates

To facilitate the preparation of a standard form of budget, it is essential that estimates be prepared in accordance with the standard account titles and functions. Uniformity should be strictly adhered to. Standard forms should be designed for departments or other organization units to be used by them when submitting their estimates. Careful thought should be given to designing these forms. What character of information will best shed the light upon requests for appropriations and what is essential to provide the best basis for investigation, are the principal considerations to be borne in mind. The number of different forms should be as few as possible, so as to simplify the work of preparing the estimate. Estimates for salaries, regular employees, for example, should be submitted on columnar ruled forms arranged to show: (1) title of position; (2) rate; (3) estimate; (subdivided as to (a) number of incumbents, (b) total amount, (c) salary increases, (d) new force); (4) comparison of estimates with latest pay-roll condition. Estimates for salaries, temporary employees, should show the title of position and rate, the number of days, weeks or months estimated to be required and the

amount necessary to pay therefor, also comparative data for the previous year.

The principle of requiring officials to show, not only the details of what is wanted, but also supporting comparative data whenever possible, admits of intelligent analysis and renders more simple the task of the appropriating body. Another valuable feature of this principle is the tendency it has to obviate careless and hastily considered estimates. It is hardly possible to prepare a logically supported estimate unless an intelligent analysis has been made of the expenses of previous periods. Estimates for supplies and materials should show in detail each kind, class, quantity and probable cost. If stores accounts have been kept, the consumption, both as to quantity and amount, during the previous year and the nearest six months period should be shown. Inventories at the beginning and end of the previous year, together with the latest one available, should also be set forth. If stores accounts have not been kept, expenditures, for the previous year and the nearest six months period, together with inventories, if available, furnish the next best information with which to support estimates.

Expenditures of the previous year are oftentimes useless as an aid in determining in advance the needs for the succeeding year. For example, purchases of supplies or materials in large quantities may be included in the expenditures for a given period, although actually consumed in subsequent periods. It is apparent, therefore, that expense accounting and stores accounting are of primary importance in efficient budget making. Through such mediums only is it possible to obtain an accurate idea of the cost of conducting each function or activity. What was obtained and what was expended in obtaining it is information necessary in determining the desirability of expansion or contraction through larger or smaller appropriations.

Departments should be given ample time in which to prepare their estimates. Printed forms should be in their hands several months in advance of the time set for passing the budget. Ample time should also be allowed for investigation of the estimates and the preparation of a tentative budget for public discussion before the appropriating body. Budgets should not be made in secret. The widest publicity is desirable, and intelligent expressions of approval or disapproval of every item should be encouraged. Estimates should

be printed for distribution. In large cities separate pamphlets should be printed for each of the large departments, because individual criticism is usually concentrated on one particular department or function.

Passing the Budget

The departmental estimates having been made available in printed form, it is always desirable that the fullest publicity be given thereto. Responsible civic organizations should be encouraged to examine into the need for the amounts requested. While it is true a department head should know more about the needs of his department than anyone else, local political conditions are often such that the time of such executives is mostly consumed with matters other than the actual conditions within their respective departments. They must rely on reports of subordinates, and these latter sometimes lack sound judgment as to the needs of even their particular divisions. They often fail to sense the comparative importance of the several functions or divisions of the department. Even when a department head is himself thoroughly informed as to the conditions within his organization he too sometimes lacks the proper perspective as to how the amounts should be apportioned between the several functions of his department. It is of much importance, therefore, that either the comptroller or the appropriating body should directly or indirectly conduct a detailed investigation to determine the adequacy or inadequacy of departmental requests. Such investigations should, of course, include careful consideration of results accomplished the previous year with the funds allowed, unit costs, and the quantity and quality of service needed to be rendered the ensuing year. Civic organizations which from year to year continue to study the field of municipal service are often specially fitted and equipped to assist in such investigations.

The budget of a city when once adopted remains in force for an entire year. It directly affects in some way the daily life of each person residing therein. The spirit of the laws upon which our entire governmental structure is erected demands that, before appropriations are formally passed, citizens be given an opportunity to appear before the appropriating body and state any objections they may have. For this reason, as soon as the estimates have been examined by the officials charged with that duty, it is desirable that a tentative budget

be prepared and public hearings held thereon. To insure an adequate interest in such public hearings, the dates and hours thereof should be given publicity in the local press at least two weeks in advance and copies of the estimates or tentative budget generously distributed. If a large number of citizens desire to be heard, a rule may be adopted whereby spokesmen only shall be recognized.

As a means to help inform the public of the vast details of a city's business, New York, in 1910 and in 1911, held what were termed "budget exhibits." They were kept open for one month immediately preceding the passage of the budget in each year. Facts and figures graphically displayed, intermingled with physical objects, informed the visitor of the city's activities—what had been and what was expected to be done with taxpayers' money. Through this means concrete information respecting estimates was made available to everybody for effective use at public hearings.

It has too frequently been the custom for a budget to be made up in "star chamber" sittings by a select coterie of political officeholders controlling the city's purse strings and then passed by a council or other legislative body sitting in "executive session." That day is rapidly passing and the people are insisting that public business be conducted publicly.

The chief financial officer may be sincere and progressive in his efforts to better municipal conditions and feel that he, and perhaps a few close advisers, alone know what is best for the city. Therefore he may refuse to take the public into his confidence, lest his pet plans receive the wrong kind of publicity and his efforts be brought to naught. He may even refuse until the last possible minute to confide in the legislative body charged by law with passing judgment upon the budget. Such a stand on the part of any public officer is ill taken. It has been demonstrated again and again that the public, when properly informed, may be relied upon to take wise action.

Many cities do not pass their annual budget until after the beginning of the fiscal year to which it relates. The annual expenditures of a city necessarily begin on the first day of its fiscal year. Unless the appropriations have been passed, such expenditures are made without adequate legal authority. Dilatory methods tend to confuse both accounting and auditing. It is desirable that ample time be provided between the final passing of the budget and the beginning of the fiscal year, to permit the administrative officers to become

thoroughly familiar with the provisions thereof, and also to permit the opening of new appropriation accounts.

Fully as important as the segregation of appropriations into standard accounts is the phrasing of the text of appropriation bills. The accounts having been selected, grouped, and codified for administration along certain definite lines, the text should clearly set forth the instructions necessary to secure such administration. For example, a paragraph similar to the following, taken from the new Chicago Budget, should be inserted in the bill:

That the comptroller and the heads of the other departments, bureaus and offices of the city government shall administer the amounts appropriated in this bill by accounts as specified by code numbers, and they are hereby prohibited from incurring any liabilities against any account in excess of the amount herein authorized for such account and from changing any salary or wage item herein.

It is always impossible to foresee all contingencies which may arise several months hence and demand an adjustment between appropriation accounts. Transfers from one account to another are therefore necessary from time to time. By compelling department heads to ask for transfers, attention is at once directed to the fact that their contemplated expenditures exceed the amount allowed, and the question which naturally arises and must be answered is, why? For this reason there will develop a tendency to exercise more economy in expenditures and keep within the original allowance if possible. Unless restrictions are imposed, however, the transfer privilege is sure to be abused. It is, therefore, well to prescribe in the bill that no transfer shall be made from a "salaries" account to any other than a "salaries" account. Similarly with respect to "salaries, temporary employees," "wages" and "wages, temporary employees," "supplies and materials," etc.

Instances have been known where a department head exhausted practically all of his appropriation for "wages" within the first few months of the year and then requested an additional appropriation or transfer.

Departments should be required to prepare their pay rolls in accordance with the items listed under appropriations for salaries or wages, regular employees, and be restricted to a monthly or weekly pro rata expenditure of the total appropriation for each item, according to the frequency of payment. By this means, all accruals resulting from the fact that positions provided for were not filled for

the entire year or on account of deductions for absences or other causes would revert automatically to the general fund of the city.

This kind of control has been in successful operation in the City of New York since 1909, and has been the means of large savings. The amount reverting to the general fund from salary and wage appropriations for 1908, prior to the adoption of the pro rata expenditure principal, was only \$300,000. For 1909 it was \$1,060,000 and in 1910 it amounted to \$1,941,000. Such a practical working out of a principle proves conclusively the need of such control. Moreover, efficiency is not curtailed. Indeed, it is increased. Not only are large savings effected, but the realization that accruals in salary and wage appropriations cannot be expended precludes any attempt, that otherwise might have been made through political or other improper influences, to utilize the money in giving away jobs or in granting unjustified increases.

If standard specifications have been adopted for the purchase of supplies and materials, a clause should be inserted that expenditures from such accounts shall be made only on the specifications adopted.

Administering the Budget

The most efficient plan of budget making may be of no avail unless the budget, after it is passed, be efficiently administered. The restrictive provisions of the budget are there to be enforced. Claims against appropriations should be allowed only when they constitute proper charges against such appropriations.

Amounts set forth in the budget should not be permitted to become over-encumbered with liabilities. The pro rata restriction as to salaries and wages should be enforced. If, through an error when originally estimating the requirements, or, through an emergency arising which could not have been foreseen sufficiently in advance, the original appropriation for a specific purpose subsequently proves to be inadequate, a request to the appropriating body for transfer of funds from other like appropriations will provide the remedy.

Transfers of unencumbered balances should not be allowed, however, until the need therefor has been sufficiently investigated and the request published in the printed proceedings of the appropriating body at least a week before it is granted.